Customer No.: 31561
Application No.: 10/711,514
Docket No.: 13621-US-PA

REMARKS

I. Present Status of the Application

The Office Action mailed February 4, 2005 objected to and rejected pending claims 1-16. Specifically, claims 1-16 were objected to because of the unnecessary word "[Claim #]" in line 1, and were rejected under 35 U.S.C. 112 and 101 for lacking active steps and being improper process/method claims. Claims 1-16 were further rejected under 35 U.S.C. 102(b) as being anticipated by Kanamitsu et al. (US 6,078,519). In response thereto, Applicants have amended independent claims 1, 7 & 12. Reconsideration of claims 1-16 is respectfully requested.

II. Response to Objections

It is noted that the appearance of the word "[Claim #]" in line 1 of each of claims 1-16 and the format of the specification are created by the electronic filing system software provided by USPTO. Therefore, Applicants respectfully request withdrawal of the objections.

III. Response to Rejections under 35 U.S.C. 112 and 101

Please refer to the amended independent claims 1, 7 and 12, the programming method of each claim includes the active steps of "giving ...", "selecting ..." and "making ...", which are all clearly described in the specification. Since the programming methods of independent claims

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1, 7 and 12 and the other claims dependent therefrom include active steps upon the amendments, Applicants respectfully request withdrawal of the corresponding rejections.

IV. Response to Rejections under 35 U.S.C. 102(b)

Please refer to the amended independent claims 1, 7 and 12, one feature of this invention is that the reference level for programming a storage state is selected according to the given level distribution of the precedent state. Therefore, the reference lever for any storage state is not a fixed value in this invention. Applicants respectfully submit that Kanamitsu et al. fail to disclose or imply the feature for the reasons set forth.

The Office Action asserts, in Page 3, that Kanamitsu et al. disclose, in col. 1, lines 44-67 and col. 2, lines 1-10, the step of selecting a reference level according to a level distribution of a plurality of memory cells in a storage state. However, it is noted that the description concerning the reference level in the two paragraphs of Kanamitsu et al. merely includes: "*Bit lines at the non-operation selection side of the sense-latch circuit are precharged at a reference level*" (col. 1, line 67 to col. 2, line 2). Therefore, in Kanamitsu's method, the reference level should be chosen from several fixed reference levels respectively set for different states ***merely according to the selection of which state to be programmed,*** as in ordinary skills, but is not selected ***further according to the given level distribution of the precedent state of the state to be programmed.***

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Meanwhile, the other paragraphs of Kanamitsu et al. either do not teach the above feature of this invention. In fact, Kanamitsu et al. merely focus on circuit designs according to its summary and claims, while the reference level ***for each state*** is set fixed as usual according to the descriptions of the Examples (e.g., 0.5V). Since in the method of Kanamitsu et al. the reference level for a state is always fixed ***without being selected according to the given level distribution of the precedent state***, the problem of inter-state window narrowing as mentioned in **[Para 6]** of the specification of this invention is present in the method of Kanamitsu et al.

For at least the above reasons, Applicants respectfully submit that independent claims 1, 7 and 12 and claims 2-6, 8-11 and 13-16 dependent therefrom patently define over the prior art.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-16 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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